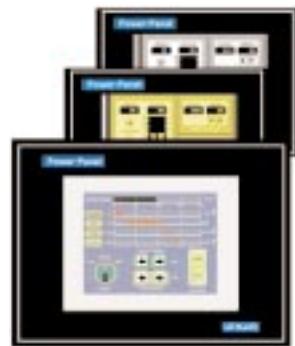


ORDERING INFORMATION:

POWERPANEL OPERATOR INTERFACES: *(pages 98-106)*

**SELECT THE POWERPANEL MODEL WITH DESIRED OPTIONS
INCLUDING MEMORY AND PLC INTERFACE TYPE...**

- PowerPanel Operator Interfaces



INDUSTRIAL COMPUTER WORKSTATIONS: *(pages 106-110)*

SELECT THE ARJUN MODEL WITH DESIRED OPTIONS...

- Arjuns
- LCD Computer Monitor

PROGRAMMABLE MESSAGE DISPLAYS: *(pages 111-126)*
SELECT THE PMD MODEL AND DESIRED OPTIONS...

- Programmable Message Displays
- Message Controllers
- Slave Message Displays



PROGRAMMABLE MARQUEE DISPLAYS: *(pages 127-135)*
SELECT THE PMD MODEL AND DESIRED OPTIONS...



- Programmable Marquee Displays

PGI 100 POWERPANEL PART NUMBERS:

5" MONOCHROME MODEL

Part Number	Description	
100G 1	5" MONOCHROME POWERPANEL BASE UNIT	
6		
B		
1R		
2		
3		
4		
10F64	uWIN	
	Windows® Screen Development Software for PGI Products	
	uWIN PGI 100 Programming Software. (Windows® version)	

uWIN is recommended for all users of any PGI product. It's powerful range of features make programming quick and easy.

Upon request, one copy of 10F64 uWIN will be supplied with a PGI order.

For PGI Interface Cables refer to page 105, and for miscellaneous PGI products (manuals, batteries, etc) please refer to page 106.

POWERPANEL PART NUMBERS CONTINUED...

5" COLOR MODEL

Part Number	Description	
5" COLOR POWERPANEL		
1: Front Bezel		
G	Standard	0
2: Voltage		
5	24 VDC	5" Displays
3: Display Screen Type		
A	5"	Active Matrix Color, NEMA 4, 40,000 hour bulb
S	5"	Passive Color, NEMA 4, 25,000 hour bulb
4: Memory		
1R	256K RAM	
5: Model		
0	Basic Unit	(Software interface)
1	Allen-Bradley	(Remote I/O, Data Highway, Data Highway Plus)
8	ProfiBus	Interface
uWIN	Windows® Screen Development Software for PGI Products	
10F64	uWIN PGI 100 Programming Software. (Windows® version)	

uWIN is recommended for all users of any PGI product. Its powerful range of features make programming quick and easy.

Upon request, one copy of 10F64 uWIN will be supplied with a PGI order.

For PGI Interface Cables refer to page 105, and for miscellaneous PGI products (manuals, batteries, etc) please refer to page 106.

POWERPANEL PART NUMBERS CONTINUED...

6" MONOCHROME MODEL

Part Number	Description	
100 <u>G</u> <u>5</u> <u>L</u> <u>1R</u> <u>0</u> <u>1</u> <u>2</u> <u>3</u> <u>4</u> <u>5</u>	6" MONOCHROME POWERPANEL BASE UNIT	
1: Front Bezel	G	Standard
2: Voltage	5	24 VDC 6" Display
3: Display Screen Type	L	6" LCD Monochrome, NEMA 4X, (3) levels of gray scale
4: Memory	1R	256K RAM
5: Model	0	Basic Unit (Software interface)
	1	Allen-Bradley (Remote I/O, Data Highway, Data Highway Plus)
	8	ProfiBus Interface
uWIN	Windows® Screen Development Software for PGI Products	
10F64	uWIN PGI 100 Programming Software. (Windows® version)	

uWIN is recommended for all users of any PGI product. It's powerful range of features make programming quick and easy.

For PGI Interface Cables refer to page 105, and for miscellaneous PGI products (manuals, batteries, etc) please refer to page 106.

POWERPANEL PART NUMBERS CONTINUED...

8" COLOR MODEL

Part Number	Description
8" COLOR POWERPANEL BASE UNIT	
1: Front Bezel	
G	Standard
2: Voltage	
8	24 VDC 8" Display
3: Display Screen Type	
S	8" Passive Color, NEMA 4X, 25,000 hour bulb
4: Memory	
1R	256K RAM
5: Model	
0	Basic Unit (Software interface)
1	Allen-Bradley (Remote I/O, Data Highway, Data Highway Plus)
8	ProfiBus Interface
uWIN	Windows® Screen Development Software for PGI Products
10F64	uWIN PGI 100 Programming Software. (Windows® version)

uWIN is recommended for all users of any PGI product. It's powerful range of features make programming quick and easy.

For PGI Interface Cables refer to page 105, and for miscellaneous PGI products (manuals, batteries, etc) please refer to page 106.

POWERPANEL PART NUMBERS CONTINUED...

9" EL MONOCHROME MODEL

Part Number	Description
100 <u>G</u> <u>1</u> <u>M</u> <u>1R</u> <u>0</u> <u>1</u> <u>2</u> <u>3</u> <u>4</u> <u>5</u>	9" EL MONOCHROME POWERPANEL BASE UNIT
1: Front Bezel	
G	Standard
SS	Stainless Steel
2: Voltage	
1	100 to 250 VAC/DC (47-63 Hz)
2	24 VDC Monochrome EL Display - 9"
3: Display Screen Type	
M	9" EL Monochrome, NEMA 4X, (3) Amber
4: Memory	
1R	256K RAM
2R	512K RAM
1F	256K Flash
2F	512K Flash
5: Model	
0	Basic Unit (Software interface)
1	Allen-Bradley (Remote I/O, Data Highway, Data Highway Plus)
6	GE Genius I/O
7	Magnetek
8	ProfiBus Interface
uWIN	Windows® Screen Development Software for PGI Products
10F64	uWIN PGI 100 Programming Software. (Windows® version)

uWIN is recommended for all users of any PGI product. It's powerful range of features make programming quick and easy.

For PGI Interface Cables refer to page 105, and for miscellaneous PGI products (manuals, batteries, etc) please refer to page 106.

POWERPANEL PART NUMBERS CONTINUED...

10.4" COLOR MODELS

Part Number	Description	
100 <u>G</u> <u>1</u> <u>S</u> <u>1R</u> <u>0</u> <u>1</u> <u>2</u> <u>3</u> <u>4</u> <u>5</u>	10.4" COLOR POWERPANELS	
1: Front Bezel		
G	Standard	
SS	Stainless Steel	
2: Voltage		
1	100 to 250 VAC/DC (47-63 Hz)	
2	24 VDC Color Display - 10.4" Active	
3	24 VDC Color Display - 10.4" Passive	
3: Display Screen Type		
C	10.4" Active Color, NEMA 4X, 40,000 hour bulb	
S	10.4" Passive Color, NEMA 4X, 25,000 hour bulb	
H	10.4" Active High Bright Screen (1500 NITS)	
4: Memory		
1R	256K RAM	
2R	512K RAM	
1F	256K Flash	
2F	512K Flash	
5: Model		
0	Basic Unit (Software interface)	
1	Allen-Bradley (Remote I/O, Data Highway, Data Highway Plus)	
6	GE Genius I/O	
7	Magnetek	
8	ProfiBus Interface	
uWIN	Windows® Screen Development Software for PGI Products	
10F64	uWIN PGI 100 Programming Software. (Windows® version)	

uWIN is recommended for all users of any PGI product. It's powerful range of features make programming quick and easy.

For PGI Interface Cables refer to page 105, and for miscellaneous PGI products (manuals, batteries, etc) please refer to page 106.

POWER PANEL PART NUMBERS CONTINUED...

PLC INTERFACE OPTION

Software Drivers

The following PLC models use software drivers and do not require any hardware interface card. Software drivers are included with uWIN software.

- A-B SLC500 AIC
- A-B PLC/5 DF1
- GE Fanuc 90-30, 90-70, SNP
- IDEC FA Series
- Klockner-Moeller PS 306/316
- Koyo (205, 305, 405)
- Mitsubishi FX
- Omron Host Link
- Siemens/TI 5x5
- Siemens S7
- Toshiba
- A-B SLC500 DF
- CTC
- GE Fanuc 90-30, 90-70, SNPX
- Keyence KV-10
- Klockner-Moeller PS4 Series
- Magnetek GPD333
- Modbus
- Reliance Automate
- Siemens 100/115/135
- Square D Symax
- UTICOR Director 6000

PLC Interface Cards

The following PLC Networks require a PLC interface card. Select appropriate interface option while ordering the PowerPanel.

- A-B Data Highway+
- GE Genius I/O
- Profibus
- A-B Remote I/O
- Magnetek

PGI 100 PLC INTERFACE CABLES:

PLC Interface Cables: (Each cable is 3 meters long and appropriately terminated.)

Part Numbers		PLC		
5" Mono	*Other OIs	Mfr.	Model(s)	Connector Type (PLC-side)
44359	43933	Allen-Bradley	SLC500 Programming Port (DH-485)	8-position phone plug w/shield
44364	43983		SLC500 AIC Link Coupler Module (RS485)	8-position female D-sub
44360	43976		SLC500 DF1 (RS422)	9-position female D-sub
44361	44314		SLC500 DF1 (RS232)	9-position female D-sub
44362	43978		SLC500 DF1 (RS485)	9-position female D-sub
44363	44313		PLC5 DF1 (RS485)	25-position male D-sub
44393	44394	CTC	CTC 2200/2600 (RS232)	6-position modular phone-type plug
44365	43939	GE	Series 90-30, 90-70 SNP, SNP-X	15-pin plug w/shield
44377	44315	IDEc	Link Adapter FA2/FA2J/FA3S/FA25M (RS232)	25-position male D-sub
44386	44385	Keyence	(RS232) Models: KV-10R, 10T, 16R, 16T, 24R, 24T, 40R, 40T, 80R, 80T, or 300	6-position modular phone-type plug
44373	43947	Klockner-Moeller	PS 306/316 (RS285)	DIN 5-pin right-angle plug
44374	44307		PS4 (RS232)	DIN 5-pin right-angle plug
44382	44381	Koyo	(RS422)	25-position male D-sub
			Models: DL305 Series (DL 340/350), or DL405 Series (DL 430/440/450)	
44384	44383	Koyo	(RS232)	25-position male D-sub
			Models: DL305 Series (DL 330/330P/340/350), or DL405 Series (DL 430/440/450)	
43151	43150	Koyo	(RS232)	Phone jack type connector
			Models: DL205 Series (DL 240/250), DL305 Series (DL 340/350), or DL405 Series (DL 450)	
44391	44389	Mitsubishi	MELSEC FX Series (RS232)	25-position male D-sub
44392	44390		MELSEC FX Series (RS422)	25-position male D-sub
44378	44318	Modicon	AEG Series A120 (RS232)	9-position male D-sub
44398	44399		AEG Modicon Micro	9-position male D-sub
44366	44312		Modbus (RS232)	9-position male D-sub
443661	443121		Modbus (RS232)	RJ 45 Connector
44367	44311	Omron	Host Link (RS232)	25-position male D-sub
44375	44309	Reliance	Automate (RS232)	25-position male D-sub
44369	43970	Siemens/TI	545 (RS422)	9-position male D-sub
	439701		545(RS422) 1104 CPU	9-position female D-sub
44370	44310		545 (RS232)	9-position female D-sub
	44308		100/115/135	9-position female D-sub
44388	44387		S7 HMI Adapter (RS232)	9-position female D-sub
44368	43934	Square D	SY/MAX (RS422)	9-position male D-sub
44379	44316	Toshiba	Prosec T Series (RS422)	15-pin D-sub
443171	44317		Prosec T Series (RS232)	9-position male D-sub
44371	44226	UTICOR	Director 6001 PLC (RS422/485)	9-position male D-sub
44372	44227		Director 6001 PLC (RS232)	9-position male D-sub

* This column includes PowerPanel models: 5" Color, 6" Monochrome, 8" Color, 9" EL, and 10.4" Color units

PGI 100 POWERPANEL MISCELLANEOUS:

PGI 100 POWERPANEL MISCELLANEOUS

Part Number	Description
28113	Fuse 2.0 A 250 V Slo Blo (24 VDC operation)
28106	Fuse 1.0 A 250 V Slo Blo (115/230 VAC operation)
28421	Battery 3.6 volt (1/2 AA Lithium) (9" & 10.4" units)
28417	Battery 3.0 volt (coin cell) (5" & 6" units)
10F64	U-Win PGI 100 Programming Software (Windows® version)
79766	PGI 100 Hardward Users Manual
79769	U-Win Software Manual
79746	PGI 100 User's Manual (For DOS Program Loader)
79751	PLC Interface Manual (Supports DOS Program Loader)
58457	Protective Screen Overlay (1 sheet) monochrome display
58461	Protective Screen Overlay (1 sheet) color display
43962	PGI to computer Programming Cable
76845	PGI 100 External Keypad Module, 6 function keys & Numeric keypad
72459	24 Volt DC Power Supply

INDUSTRIAL COMPUTER WORKSTATIONS:

ARJUN Industrial Computer Workstation

Part Number	Description
500M - 2 S <u>32</u> S 3 1	

This part number defines the standard ARJUN Industrial Computer Workstation. The standard unit comprises:

- Color LCD, 25,000-hour backlight bulb life
- Microsoft® Windows 98® Operating System
- 166 MHz Pentium CPU
- 32 Mbyte RAM
- Six Slots
- 115/230 VAC Power Supply
- Touchscreen (analog resistive) with keyboard
- >1.2 Gbyte hard disk
- User's Manual
- TTWin Touchscreen Operational Manual

Nonstandard units can be ordered with the following memory option:

1 =	Total System Memory (RAM)	Substitute for "32" in the standard part number
64	64 Mbyte	
128	128 Mbyte	

MISCELLANEOUS PARTS:

58291	AT 101-style keyboard (portable)
58431	Industrial mouse (desk top)
58432	Industrial mouse (panel mount)
78055	NEMA 12 Enclosure-holds PWS 500M
78055-F	NEMA 12 Enclosure with removable mounting flanges
79771	User's Manual (additional copy)
79772	TTWIN Touchscreen Operational Manual (additional copy)

INDUSTRIAL COMPUTER PART NUMBERS CONTINUED...

ARJUN II Industrial Computer Workstation

Part Number	Description
502M 2S <u>1</u> <u>2</u> <u>32</u> T 3	
This part number defines the standard ARJUN II Industrial Computer Workstation. The standard unit comprises:	
	<ul style="list-style-type: none">• Color 10" LCD, 25,000-hour backlight bulb life• 233 MHz Pentium CPU• One PCI/ISA Dual-Bus Slot• Touchscreen (analog resistive)• User's Manual• Microsoft® Windows 98® Operating System• 32 Mbyte RAM• 115/230 VAC Power Supply• >3.2 Gbyte hard disk• TTWin Touchscreen Operational Manual
<i>Nonstandard units can be ordered with any or all of the following options:</i>	
1: Number of Slots	Substitute for "1" in the standard part number
3	Three slots (one PCI/ISA Dual-bus, one PCI, and one ISA slots)
2: Display Size	Substitute for "A" in the standard part number
B	12" (12.1" actual) Color LCD, 25,000-hour backlight bulb life
C	14" (13.8" actual) Color LCD, 25,000-hour backlight bulb life
3: Total System Memory (RAM)	Substitute for "32" in the standard part number
64	64 Mbyte
128	128 Mbyte
MISCELLANEOUS PARTS:	
58300	AT 101-style keyboard (portable)
58431	Industrial mouse (desk top)
58432	Industrial mouse (panel mount)
79781	User's Manual (additional copy)
MAN-ARJN2-001	Touchscreen Operational Manual (additional copy)

INDUSTRIAL COMPUTER PART NUMBERS CONTINUED...

IMPORTANT— This Product consists of Three Components, therefore, You Must Order One Each of the following:

ARJUN III — CPU CHASSIS, DISPLAY, AND INTERCONNECTING CABLE

Part Number	Description
CPU Chassis:	
503M - C 6 A <u>032</u> A 1	CPU CHASSIS
<ul style="list-style-type: none"> • Microsoft® Windows 98® Operating System • 32 Mbyte RAM • 115/230 VAC Power Supply • User's Manual 	<ul style="list-style-type: none"> • 233 MHz Pentium® CPU • Six Slots • >3.2 Gbyte hard disk • TTWin Touchscreen Operational Manual
<i>Nonstandard units can be ordered with the following option:</i>	
1: Total System Memory (RAM) Substitute for "032" in the standard part number	
064	64 Mbyte
128	128 Mbyte
Display:	
503M - D <u>xx</u> S 1	COLOR LCD DISPLAY
1: Display Size	Substitute for "xx" in the standard part number
12"	12.1" Color LCD Display, 25,000-hour backlight bulb life
14"	13.8" Color LCD Display, 25,000-hour backlight bulb life
Interconnecting Cable:	
CBL-ARJN3-002	9.8 ft. (3 m) LVDS/Power Cable
CBL-ARJN3-003	32.8 ft. (10 m) LVDS/Power Cable
MISCELLANEOUS PARTS:	
58300	AT 101-style keyboard (portable)
MAN-ARJN3-001	User's Manual (additional copy)
MAN-ARJN2-001	Touchscreen Operational Manual (additional copy)

LCD COMPUTER MONITOR:

12" FLAT-PANEL VGA MONITOR

Part Number	Description
200M - 1C1T	12" FLAT-SCREEN HIGH-BRIGHT MONITOR WITH TOUCHSCREEN (INCLUDES MANUAL AND TOUCHSCREEN SOFTWARE)
200M - 1D1T	12" FLAT-SCREEN STANDARD MONITOR WITH TOUCHSCREEN (INCLUDES MANUAL AND TOUCHSCREEN SOFTWARE)

MISCELLANEOUS

10F87	Touchscreen software (additional copy can be downloaded from the AVG web site: www.avg.net)
MAN-PGMIC-001	Manual (additional copy)

MASTER MESSAGE DISPLAYS:

PMD 150 MASTER MESSAGE DISPLAY

Part Number	Description
150-115 N 2L 08 EC 1 2 3 4 5 6	THE PMD 150 MESSAGE DISPLAY OFFERS TWO-LINES OF 20 VACUUM FLOURESCENT CHARACTERS
1: Model	
150	PMD 150 (two-lines of 20 characters per line)
155	PMD 155 (PMD 150 with eight function keys & numeric keypad)
2: Voltage	
024	24 VDC Power Supply
115	115 VAC Power Supply
230	230 VAC Power Supply
3: Front Plate	
N	NEMA 12 with Mounting Studs
C	NEMA 12 with Clearance Holes (PMD 150 only)
S	NEMA 4X Stainless Steel (PMD 150 only)
D	DIN Construction (order 58281 mounting kit separately)
B	DIN with Stainless Steel (order 58281 mounting kit separately)
F	Blank front, no logo, NEMA 12, with mounting studs
4: Inputs	
08	Eight Isolated Inputs
16	16 Isolated Inputs
5: Memory	
L	8K EPROM (light erasable, requires 76518 programming unit)
E	8K EEPROM
6: Clock	
X	No Clock
C	Clock Installed
Miscellaneous:	
28109	Fuse 0.75 A (24 VDC Operation)
28110	Fuse 0.25 A (115/230 VAC Operation)
43397	Input Cable 3-meter, 25-pin D-connector
58281	DIN mounting kit
75E02	Real-time clock board
75E03	9-16 bit input board (PMD 150 only)
75E04	Plug-in terminal block (PMD 150 only)
75E28	Plug-in 24 VDC sinking parallel input terminal block
75G20	Plug-in terminal block for PMD 155 terminals
79707	User's Manual
10F50	PMD programming software (one per PMD order)

MASTER MESSAGE DISPLAY PART NUMBERS CONTINUED...

PMD 180 MASTER MESSAGE DISPLAY

180-24A 1 2 N 032R 0 5

THE PMD 180 IS A COMPACT MESSAGE DISPLAY THAT DIRECTLY INTERFACES TO MAJOR BRANDS OF PLCs.

1: Model

180-22A	Display with two lines, 20 characters, 5 mm
180-24A	Display with two lines, 40 characters, 5 mm
180-42A	Display with four lines, 20 characters, 5 mm

2: Voltage

1	115/230 VAC Power Supply
2	24 VDC Isolated Power Supply

3: Front Plate

N	NEMA 12 with Mounting Studs
S	NEMA 4X Stainless Steel
F	Blank front, NEMA 12

4: Memory Size

008E	8K EEPROM
032E	32K EEPROM
064E	64K EEPROM
128E	128K EEPROM
032R	32K RAM
128R	128K RAM

5: Options

0	None
1	Slave, Printer and Parallel Port
2	RS485 Interface w/out Slave Printer Parallel Port

Note: Option 1 or 2 must be installed for any PLC using RS-485.

Miscellaneous:

28107	Fuse 0.5 A (24 VDC operation)
28110	Fuse 0.25 A (115/230 VAC operation)
28421	Battery 3.6 volt (1/2 AA Lithium)
43932	25 to 9 pin programming cable for PMD 180 (RS-232C)
10F54	PMD 180 Programming Software (one per PMD order)
79736	User's Manual

MASTER MESSAGE DISPLAY PART NUMBERS CONTINUED...

PCI 185 MASTER MESSAGE DISPLAY

185-42A 1 2 N 3 032R 0 5 6

THE PCI 185 IS A COMPACT OPERATOR INTERFACE THAT DIRECTLY
INTERFACES TO MAJOR BRANDS OF PLCs.

1: Model

185-22A	Display with two lines of 20 characters, 5 mm
185-24A	Display with two lines, 40 characters, 5 mm
185-42A	Display with four lines of 20 characters, 5mm

2: Voltage

1	115/230 VAC Power Supply
2	24 VDC Isolated Power Supply

3: Front Plate

N	NEMA 12 with Mounting Studs
S	NEMA 4X Stainless Steel
F	Blank front, NEMA 12

4: Memory Size

008E	8K EEPROM
032E	32K EEPROM
064E	64K EEPROM
128E	128K EEPROM
032R	32K RAM
128R	128K RAM

5: Options

0	None
1	Slave, Printer and Parallel Port
2	RS485 Interface w/out Slave Printer Parallel Port

Note: Option 1 or 2 must be installed for any PLC using RS-485.

6: The following are for 185-22A ONLY

Blank	16 Function Keys, 16 LEDs, Numeric Keypad
C	8 Function Keys, Numeric Keypad
G	8 Function Keys

Miscellaneous:

28107	Fuse 0.5 A (24 VDC operation)
28110	Fuse 0.25 A (115/230 VAC operation)
28421	Battery 3.6 volt (1/2 AA Lithium)
43932	25 to 9 pin programming cable for PCI 185 (RS-232C)
10F54	PMD 180 Programming Software
79733	User's Manual
75H79	DSub to Terminal Block Adapter

MASTER MESSAGE DISPLAY PART NUMBERS CONTINUED...

PCI 185E MASTER MESSAGE DISPLAY

185E-22E 2 N 032R 2 A THE PCI 185E MASTER MESSAGE DISPLAY
1 **2** **3** **4**

185-22E **Display with two lines of 20 characters, 5 mm**

2 24 VDC Isolated Power Supply

1: Front Plate

N	NEMA 12 with Mounting Studs
S	NEMA 4X Stainless Steel
F	Blank front, NEMA 12

2: Memory Size

008E	8K EEPROM
032E	32K EEPROM
064E	64K EEPROM
128E	128K EEPROM
032R	32K RAM
128R	128K RAM

3: Options

2	RS485 Interface w/out Slave Printer Parallel Port
---	---

Note: Option 1 or 2 must be installed for any PLC using RS-485.

4: Bezel Interface Options

Blank	16 Function Keys, 16 LED's, Numeric Keypad
A	16 Function Keys, Numeric Keypad/without LED's

Miscellaneous

28107	Fuse 0.5 A (24 VDC operation)
28110	Fuse 0.25 A (115/230 VAC operation)
28421	Battery 3.6 volt (1/2 AA Lithium)
43932	25 to 9 pin programming cable for PCI 185 (RS-232C)
10F54	PMD 180 Programming Software
79733	User's Manual
75H79	DSub to Terminal Block Adapter

PMD 180 / PCI 185 INTERFACE CABLES:

Part Number	PLC Manufacturer	PLC Model
43933	Allen-Bradley	SLC 500 AIC Link Coupler Module
43933		Data Highway (RS-485A)
43976		SLC 500 DF1 (RS-422A)
43977		SLC 500 DF1 (RS-232C)
43978		SLC 500 DF1 (RS-485A)
43982		PLC/5 DF1
43983		SLC 500 Programming Port
Direct Wiring	Cutler-Hammer	EX100/250/500/200B
43939	GE Fanuc	Series 90-30, 90-70 SNP
43939		Series 90-30, 90-70 SNP-X
43974	IDEC	FA2/FA2J/FA3S/FA25M
43947	Klockner-Moeller	PS306/316
43972	Mitsubishi	Melsec-A (RS-422A)
43973		Melsec-A (RS-232C)
43946		FX Series
43940	Modicon	Modbus
43948		Series A120
43945	Omron	Host Link
43944	Reliance	XLII
43975		Automate 15/20/30/40
43941	Siemens	100 Series
43981		115u Series
44273	Siemens/TI	405
43970		545 (RS-422A)
43971		545 (RS-232C)
43934	Square D	SY/MAX
Direct Wiring	Toshiba	EX100/250/500/200B

Note: All Cables are three meters in length.

MASTER MESSAGE DISPLAY PART NUMBERS CONTINUED...

PMD 200 MASTER MESSAGE DISPLAY

THE PMD 200 MESSAGE DISPLAY PROVIDES TWO-LINES OF 20 VACUUM FLUORESCENT CHARACTERS. IN ADDITION, IT OFFERS 8K EEPROM MESSAGE MEMORY AND CAN BE EXPANDED TO 16, 24 OR 32K.

PMD 200

76536-1	NEMA 12, 115/230 VAC, 8K memory
76539-1	NEMA 12, 24 VDC non-isolated power supply, 8K memory
76536SS-1	NEMA 4X, 115/230 VAC, 8K memory
76539SS-1	NEMA 4X, 24 VDC non-isolated power supply, 8K memory

Additional Message Memory

-3	16K total message memory
-5	24K total message memory
-7	32K total message memory

Substitute -1 with one of the above options.

The units also provide mounting studs. To provide clearance holes instead of studs add the letter "C" to the part number, eg. 76536C-1

Input Adapters for Parallel Port

76540	115 VAC Input Adapter
-------	-----------------------

Miscellaneous

28104	Fuse 0.75 A (115 VAC operation)
28105	Fuse 1.5 A (24 VDC operation)
28108	Fuse 0.375 A (230 VAC operation)
79702	User's Manual
10F50	Programming Software (one per PMD order)

MASTER MESSAGE DISPLAY PART NUMBERS CONTINUED...

PMD 300 SERIES MASTER MESSAGE DISPLAYS

THE PMD 300 SERIES IS A FOUR-LINE, 20 CHARACTER VACUUM FLUORESCENT DISPLAY.
THE PMD 300 SERIES IS ALSO AVAILABLE WITH VARIOUS PLC INTERFACES.

PMD 300 Parallel Interface

76561-16	NEMA 12, 115/230 VAC, 16K memory
76562-16	NEMA 12, 24 VDC, 16K memory
76561SS-16	NEMA 4X, 115/230 VAC, 16K memory
76562SS-16	NEMA 4X, 24 VDC, 16K memory

PMD 350 Allen-Bradley Remote I/O Interface Data Highway, Data Highway Plus

76584-16	NEMA 12, 115/230 VAC, 16K memory
76585-16	NEMA 12, 24 VDC, 16K memory
76584SS-16	NEMA 4X, 115/230 VAC, 16K memory
76585SS-16	NEMA 4X, 24 VDC, 16K memory

PMD 360 Texas Instruments Remote I/O Interface

76651-16	NEMA 12, 115/230 VAC, 16K memory
76652-16	NEMA 12, 24 VDC, 16K memory
76651SS-16	NEMA 4X, 115/230 VAC, 16K memory
76652SS-16	NEMA 4X, 24 VDC, 16K memory

PMD 380 GE Genius I/O

76663-16	NEMA 12, 115/230 VAC 16K memory
76664-16	NEMA 12, 24 VDC, 16K memory
76663SS-16	NEMA 4X, 115/230 VAC, 16K
76664SS-16	NEMA 4X, 24 VDC, 16K memory

Input Adapters for Parallel Port (PMD 300 only)

76546	115/230 VAC Input Adapter
76566	Source Diode Adapter
76567	Sink Diode Adapter

Additional Message Memory

-32	32K total message memory
-64	64K total message memory
-128	128K total message memory

Note: Replace the -16 with one of the above options.

Miscellaneous

28105	Fuse 1.5 A.(24 VDC)
28106	Fuse 1.0 A (115 VAC)
28107	Fuse 0.5 A (230 VAC)
79710	User's Manual

MASTER MESSAGE DISPLAYS PART NUMBERS CONTINUED...

PMD 400 SERIES MASTER MESSAGE DISPLAYS

THE PMD 400 SERIES IS A FOUR-LINE, 20 CHARACTER VACUUM FLUORESCENT DISPLAY WITH USER DEFINED FUNCTION KEYS AND LED INDICATORS. THE PMD 400 SERIES IS ALSO AVAILABLE WITH VARIOUS PLC INTERFACES.

PMD 400 Serial Interface

76701-16	NEMA 12, 115/230 VAC, 16K memory
76702-16	NEMA 12, 24 VDC, 16K memory
76701SS-16	NEMA 4X, 115/230 VAC, 16K memory
76702SS-16	NEMA 4X, 24 VDC, 16K memory

PMD 450 Allen-Bradley Remote I/O Interface Data Highway, Data Highway Plus

76711-16	NEMA 12, 115/230 VAC, 16K memory
76712-16	NEMA 12, 24 VDC, 16K memory
76711SS-16	NEMA 4X, 115/230 VAC, 16K memory
76712SS-16	NEMA 4X, 24 VDC, 16K memory

PMD 460 Texas Instruments Remote I/O Interface

76721-16	NEMA 12, 115/230 VAC, 16K memory
76722-16	NEMA 12, 24 VDC, 16K memory
76721SS-16	NEMA 4X, 115/230 VAC, 16K memory
76722SS-16	NEMA 4X, 24 VDC, 16K memory

PMD 480 GE Genius I/O

76751-16	NEMA 12, 115/230 VAC, 16K memory
76752-16	NEMA 12, 24 VDC, 16K memory
76751SS-16	NEMA 4X, 115/230 VAC, 16K memory
76752SS-16	NEMA 4X, 24 VDC, 16K memory

Additional Message Memory

-32	32K total message memory
-64	64K total message memory
-128	128K total message memory

Replace the -16 with one of the above options.

Miscellaneous:

28105	Fuse 1.5 A.(24 VDC)
28106	Fuse 1.0 A (115 VAC)
28107	Fuse 0.5 A (230 VAC)
79728	User's Manual
43686	Replacement Legend

MESSAGE CONTROLLERS:

PMD 180 MESSAGE CONTROLLER (NO DISPLAY)

180 MC - 1P 032R
1 2 3

1: Model

Basic Unit

2: Voltage

1P	115/230 VAC Power Supply
2P	24 VDC Isolated Power Supply

3: Memory Size

008E	8K EEPROM
032E	32K EEPROM
064E	64K EEPROM
128E	128K EEPROM
032R	32K RAM
128R	128K RAM

Miscellaneous

28107	Fuse 0.5 A (24 VDC operation)
28110	Fuse 0.25 A (115/230 VAC operation)
28421	Battery 3.6 volt (1/2 AA Lithium)
43932	25 to 9 pin programming cable for PMD 180 (RS-232C)
10F54	PMD 180 Programming Software (one per MC order)
79736	User's Manual

MESSAGE CONTROLLER PART NUMBERS CONTINUED...

PMD 300 SERIES MESSAGE CONTROLLERS (NO DISPLAY)

PMD MESSAGE CONTROLLERS OPERATE SIMILAR TO THE PMD 300 SERIES WITH THE EXCEPTION THEY DO NOT OFFER A VACUUM FLUORESCENT DISPLAY. MESSAGE CONTROLLERS ARE USED TO CONTROL PMD SLAVE DISPLAYS.

PMD 300 MC Parallel Interface

76571-16	115/230 VAC, 16K memory
76572-16	24 VDC, 16K memory

PMD 350 MC Allen-Bradley Remote I/O Interface Data Highway, Data Highway Plus

76591-16	115/230 VAC, 16K memory
76592-16	24 VDC, 16K memory

PMD 360 MC Texas Instruments Remote I/O Interface

76653-16	115/230 VAC, 16K memory
76654-16	24 VDC, 16K memory

PMD 380 MC GE Genius I/O

76665-16	NEMA 12, 115/230 VAC, 16K memory
76666-16	NEMA 12, 24 VDC, 16K memory

Additional Message Memory

-32	32K total message memory
-64	64K total message memory
-128	128K total message memory

Note: Replace the -16 with one of the above options.

Miscellaneous

28105	Fuse 1.5 A (24 VDC operation)
28107	Fuse 0.5 A (115 VAC operation)
79710	User's Manual
10F50	Programming Software (one per MC order)

SLAVE MESSAGE DISPLAYS:

PMD 150 SLAVE MESSAGE DISPLAY

150S - 115 N 2L
1 2 3 4

PMD SLAVES CONNECT TO ANY UTICOR MASTER DISPLAY OR COMPUTER. ALL UTICOR SLAVE MESSAGE DISPLAYS SUPPORT UTICOR AND ASCII PROTOCOL. THESE PROTOCOLS ARE JUMPER SELECTABLE. SLAVE DISPLAYS DO NOT STORE MESSAGES.

1: Model

150 PMD 150 (two-lines of 20 characters per line)

2: Voltage

024 24 VDC Power Supply
115 115 VAC Power Supply
230 230 VAC Power Supply

3: Front Plate

N NEMA 12 with Mounting Studs
C NEMA 12 with Clearance Holes (PMD 150 only)
S NEMA 4X Stainless Steel
D DIN Construction (order 58281 mounting kit separately)
B DIN with Stainless Steel (order 58281 mounting kit separately)
F Blank Front Plate, NEMA 12

SLAVE MESSAGE DISPLAY PART NUMBERS CONTINUED...

PMD 180 SLAVE MESSAGE DISPLAY

180S - 24A 1 2 N 3

PMD SLAVES CONNECT TO ANY UTICOR MASTER DISPLAY OR COMPUTER. ALL UTICOR SLAVE MESSAGE DISPLAYS SUPPORT UTICOR AND ASCII PROTOCOL. THESE PROTOCOLS ARE JUMPER SELECTABLE. SLAVE DISPLAYS DO NOT STORE MESSAGES.

1: Model

180S-22A	Display with two lines of 20 characters, 5mm
180S-24A	Display with two lines of 40 characters, 5mm
180S-42A	Display with four lines of 20 characters, 5mm

2: Voltage

1	115/230 VAC Power Supply
2	24 VDC Isolated Power Supply

3: Front Plate

N	NEMA 12 w/ mounting studs
S	NEMA 4X Stainless Steel
F	Blank Front Plate, NEMA 12

Miscellaneous

28109	Fuse 0.75 A (24 VDC operation)
28110	Fuse 0.25 A (115/230 VAC operation)
79741	User's Manual

SLAVE MESSAGE DISPLAY PART NUMBERS CONTINUED...

PMD 200 SLAVE MESSAGE DISPLAYS

76538	NEMA 12, 115/230 VAC Power Supply
76544	NEMA 12, 24 VDC non-isolated power supply
76538SS	NEMA 4X, 115/230 VAC Power Supply
76544SS	NEMA 4X, 24 VDC non-isolated power supply

PMD 300 SLAVE MESSAGE DISPLAYS

76547	NEMA 12, 115/230 VAC Power Supply
76550	NEMA 12, 24 VDC Power Supply
76547SS	NEMA 4X, 115/230 VAC Power Supply
76550SS	NEMA 4X, 24 VDC Power Supply

MISCELLANEOUS SLAVE MESSAGE DISPLAY ITEMS

28105	Fuse 1.5 A (24 VDC operation)
28106	Fuse 1.0 A (115 VAC operation)
28107	Fuse 0.5 A (230 VAC operation)
58281	DIN mounting kit
79713	User's Manual (PMD 150 Slave)
79722	User's Manual (PMD 200/300 Slave)

ENCLOSURES:

ENCLOSURES FOR MESSAGE DISPLAYS

PMD 150 Enclosures

78033	NEMA 12, 8" high - holds PMD 150 and optional switches
78033-F	NEMA 12, 8" high - with mounting flanges

PMD 155 Enclosures

78038	NEMA 12, 8" high - holds PMD 155 and optional switches
78038-F	NEMA 12, 8" high - with mounting flanges

PMD 180/180S Enclosures

78039	NEMA 12, 8" high - holds PMD 180 and optional switches - 24A
78039-F	NEMA 12, 8" high - with mounting flanges
78042	NEMA 12, 8" high - holds PMD 180 - 22A and 42A
78042-F	NEMA 12, 8" high - with mounting flanges

PCI 185 Enclosures

78040	NEMA 12, 8" high - holds PCI 185 and optional switches - 24A
78040-F	NEMA 12, 8" high - with mounting flanges
78043	NEMA 12, 8" high - holds PCI 185 - 22A
78043-F	NEMA 12, 8" high - with mounting flanges
78044	NEMA 12, 8" high - holds PCI 185 - 42A
78044-F	NEMA 12, 8" high - with mounting flanges

PMD 200 Enclosures

78027	NEMA 12, 8" high - holds PMD 200 and optional switches
78027-F	NEMA 12, 8" high - with removable mounting flanges
78028	NEMA 12, 10" high - holds PMD 200, switches and adapter
78028-F	NEMA 12, 10" high - with removable mounting flanges

PMD 300/400 Enclosures

78029	NEMA 12, 8" high - holds PMD 300
78029-F	NEMA 12, 8" high - with removable mounting flanges
78030	NEMA 12, 10" high - holds PMD 300 and optional switches
78030-F	NEMA 12, 10" high - with removable mounting flanges
78031	NEMA 12, 12" high - holds PMD 300, switches and adapter
78031-F	NEMA 12, 12" high - with removable mounting flanges

ENCLOSURE PART NUMBERS CONTINUED...

ENCLOSURES FOR POWERPANELS

PGI 100 Enclosures

78053	NEMA 12 - holds PGI 100 9" EL monochrome display
78053-F	NEMA 12 - with removable mounting flanges
78054	NEMA 12 - holds PGI 100 10.4" TFT color display
78054-F	NEMA 12 - with removable mounting flanges
78058	NEMA 12 - holds PGI 100 6" LCD monochrome display
78058-F	NEMA 12 - with removable mounting flanges

MISCELLANEOUS MESSAGE DISPLAY ITEMS:

MISCELLANEOUS MESSAGE DISPLAY ITEMS

Part Number	Description
43962	RS-232 (IBM PC to UTICOR products) 3 meters (25 and 9 pin programming)
43424-07	Remote Operator Station to PMD 300/3100, 7 meters
43424-15	Remote Operator Station to PMD 300/3100, 15 meters
43424-23	Remote Operator Station to PMD 300/3100, 23 meters
43424-30	Remote Operator Station to PMD 300/3100, 30 meters
58263	Remote Operator Station (used with PMD 300/3100)
58411	PMD 300/400 Shock Mounting Kit
76535	Isolated Bi-directional Adapter (RS-232 to RS-422)
76830	Isolated Bi-directional Adapter (RS-422 to RS-422)
76807	TI 405 Interface Module for PMDs with a computer port
79732	Manual for TI 405 Interface Module
58372	SIP 100 Serial Impact Printer
58373	230 VAC, 50 Hz European plug
58374	240 VAC, 50 Hz UK plug
58371	Small Paper roll for SIP 100 (10 rolls per package)
43496	Cable from PMD to SIP 100 (4 meters) 25-pin connector
44238	Cable from PMD 180/PCI 185 to SIP 100 (four meters) 9-pin connector
79734	SIP 100 user's manual

LED-BASED MARQUEE DISPLAYS:

PMD 1100, 1200, 1205 MARQUEES

THE PMD 1100, 1200, AND 1205 ARE STACKABLE SLAVES THAT USE RED LEDs FOR THEIR DISPLAYS. THEY ARE ALSO AVAILABLE WITH ONE TO EIGHT LINES. THE PMDS CAN BE CONTROLLED WITH UTICOR OR ASCII PROTOCOL. THE UNITS COME STANDARD AS HANGING DISPLAYS, BUT WALL MOUNTING BRACKETS CAN BE PURCHASED.

PMD 1100 Series

Description

1100-1	1-line, twenty 2-inch characters
1100-2	2-line, twenty 2-inch characters
1100-3	3-line, twenty 2-inch characters
1100-4	4-line, twenty 2-inch characters
1100-5	5-line, twenty 2-inch characters
1100-6	6-line, twenty 2-inch characters
1100-7	7-line, twenty 2-inch characters
1100-8	8-line, twenty 2-inch characters

PMD 1200 Series

1200-1	1-line, twenty 4-inch characters
1200-2	2-line, twenty 4-inch characters
1200-3	3-line, twenty 4-inch characters
1200-4	4-line, twenty 4-inch characters
1200-5	5-line, twenty 4-inch characters
1200-6	6-line, twenty 4-inch characters
1200-7	7-line, twenty 4-inch characters
1200-8	8-line, twenty 4-inch characters

PMD 1205 Series

1205-1	1-line, ten 4-inch characters
1205-2	2-line, ten 4-inch characters
1205-3	3-line, ten 4-inch characters
1205-4	4-line, ten 4-inch characters
1205-5	5-line, ten 4-inch characters
1205-6	6-line, ten 4-inch characters
1205-7	7-line, ten 4-inch characters
1205-8	8-line, ten 4-inch characters

All units are 115/230 VAC, NEMA 12. Consult factory for other sizes and configurations.

Consult factory for LED colors other than red.

LED-BASED MARQUEE DISPLAY PART NUMBERS CONTINUED...

WALL MOUNTED END PLATES FOR PMD 1100 & 1200 SERIES

PMD 1100 Wall Mounted End Plates Part Number

1100-1	58378
1100-2	58379
1100-3	58380
1100-4	58381
1100-5	58382
1100-6	58383
1100-7	58384
1100-8	58385

PMD 1200 Wall Mounted End Plates

1200-1/1205-1	58386
1200-2/1205-2	58387
1200-3/1205-3	58388
1200-4/1205-4	58389
1200-5/1205-5	58390
1200-6/1205-6	58391
1200-7/1205-7	58392
1200-8/1205-8	58393

MISCELLANEOUS PARTS

28104	Fuse .75 A (115 VAC operation)
28108	Fuse .375 A (230 VAC operation)
58366	PMD 1100 back-to-back hanging kit (for two individual 1100-1s)
58367	PMD 1200 back-to-back hanging kit (for two individual 1200-1s or 1205-1s)
79730	PMD 1100/1200 User's Manual

LED-BASED MARQUEE DISPLAY PART NUMBERS CONTINUED...

PMD 1400 MARQUEES

THE PMD 1400 IS THE LATEST IN OUR EXTENSIVE LINE OF PMD PRODUCTS. LIKE NO OTHER, THE PMD 1400 IS A NUMERIC DISPLAY WITH FOUR INCH DIGITS. EACH DIGIT IS A SEVEN-SEGMENT RED LED. THERE ARE TWO MODELS AVAILABLE, ONE WITH FOUR DIGITS AND ONE WITH SIX DIGITS.

PMD 1400 Series	Description
1404-1P	One line, Four-digit basic unit, panel mount
1404-1	One line, Four-digit basic unit
1404-2	Two line, Four-digit basic unit
1404-3	Three line, Four-digit basic unit
1404-4	Four line, Four-digit basic unit
1404-5	Five line, Four-digit basic unit
1404-6	Six line, Four-digit basic unit
1404-7	Seven line, Four-digit basic unit
1404-8	Eight line, Four-digit basic unit
1406-1	One line, Six-digit basic unit
1406-2	Two line, Six-digit basic unit
1406-3	Three line, Six-digit basic unit
1406-4	Four line, Six-digit basic unit
1406-5	Five line, Six-digit basic unit
1406-6	Six line, Six-digit basic unit
1406-7	Seven line, Six-digit basic unit
1406-8	Eight line, Six-digit basic unit

Note: All units are 115/230 VAC, NEMA 12

75G40	Counter/parallel input option board
75G56	Real-time clock option board
75G55	Printer port sub-option board (must have 75G40 or 75G56)
75G87	Analog current input board (4-20mA and 10-50mA)
75G92	Analog voltage input board (0-1 VDC and 0-10 VDC)
79737	PMD 1400 user's manual

WALL MOUNT END PLATES FOR PMD 1400 SERIES

1404-1/1406-1	58438
1404-2/1406-2	58439
1404-3/1406-3	58440
1404-4/1406-4	58441
1404-5/1406-5	58442
1404-6/1406-6	58443
1404-7/1406-7	58444
1404-8/1406-8	58445

LED-BASED MARQUEE DISPLAY PART NUMBERS CONTINUED...

PMD 3000 MARQUEE DISPLAY

Part Number	Description
3000 - N 1W2H 1 2 3	PMD SLAVES CONNECT TO ANY UTICOR MASTER DISPLAY OR COMPUTER. ALL UTICOR SLAVE MESSAGE DISPLAYS SUPPORT UTICOR AND ASCII PROTOCOL. THESE PROTOCOLS ARE JUMPER SELECTABLE. SLAVE DISPLAYS DO NOT STORE MESSAGES.
1: Housing	
N	NEMA 12
S	Stainless Steel
F	NEMA 4
2: Size	
1W2H	11.5" x 40" x 4"
1W4H	16.3" x 40" x 4"
1W8H	25.9" x 40" x 4"
2W2H	11.5" x 76" x 4"
2W4H	16.3" x 76" x 4"
2W8H	25.9" x 76" x 4"
4W2H	11.5" x 150" x 4"
4W4H	16.3" x 150" x 4"
3: LED Type	
Blank	Normal Brightness
B	High Brightness

Note: Consult factory for LED colors other than red.

LED-BASED MARQUEE DISPLAY PART NUMBERS CONTINUED...

MISCELLANEOUS

27632	Fuse 5.0 A Slo-Blo
27633	Fuse 1.5 A Slo-Blo
27637	Fuse 3.0 A Slo-Blo
79722	User's Manual

HANGING KITS (STANDARD)

58257	Single Display, 1W2H / 2W2H
58258	Single Display, 1W4H / 2W4H
58259	Single Display, 1W8H / 2W8H
58268	Single Display, 4W2H / 4W4H
58260	Back-to-back, 1W2H / 2W2H
58261	Back-to-back, 1W4H / 2W4H
58262	Back-to-back, 1W8H / 2W8H
58270	Back-to-back, 4W2H / 4W4H

HANGING KITS (STAINLESS STEEL)

58401	Single Display, 1W2H / 2W2H
58402	Single Display, 1W4H / 2W4H
58403	Single Display, 1W8H / 2W8H
58407	Single Display, 4W2H / 4W4H
58404	Back-to-back, 1W2H / 2W2H
58405	Back-to-back, 1W4H / 2W4H
58406	Back-to-back, 1W8H / 2W8H
58408	Back-to-back, 4W2H / 4W4H

LED-BASED MARQUEE DISPLAY PART NUMBERS CONTINUED...

PMD 3100 MARQUEE DISPLAY

Part Number	Description
3100 - <u>1</u> <u>2</u> <u>016</u> <u>3</u> <u>4</u> <u>S</u> <u>1W2H</u> <u>5</u> <u>6</u>	THE PMD 3100 SERIES MASTER DISPLAYS USE RED LEDs. THE PMD 3100 OFFERS 16K EEPROM MESSAGE MEMORY AND CAN BE EXPANDED TO 32, 64 OR 128K.
1: Interface	
3100	Parallel
3150	Allen-Bradley Remote I/O Data Highway, Data Highway Plus
3160	Texas Instruments Remote I/O
3180	GE Genius I/O
2: Housing	
N	NEMA 12
S	Stainless Steel
F	NEMA 4
3: Memory	
016	16K EEPROM
032	32K EEPROM
064	64K EEPROM
128	128K EEPROM
4: Sides	
S	Single Sided
5: Size SS Adder High Bright	
1W2H	11.5" x 40" x 4"
1W4H	16.3" x 40" x 4"
1W8H	25.9" x 40" x 4"
2W2H	11.5" x 76" x 4"
2W4H	16.3" x 76" x 4"
2W8H	25.9" x 76" x 4"
4W2H	11.5" x 150" x 4"
4W4H	16.3" x 150" x 4"
6: LED Type	
Blank	Normal Brightness
B	High Brightness

Note: Consult factory for LED colors other than red.

LED-BASED MARQUEE DISPLAY PART NUMBERS CONTINUED...

MISCELLANEOUS

27632	Fuse 5.0 A Slo-Blo
27633	Fuse 1.5 A Slo-Blo
27637	Fuse 3.0 A Slo-Blo
79726	User's Manual

HANGING KITS (STANDARD)

58257	Single Display, 1W2H / 2W2H
58258	Single Display, 1W4H / 2W4H
58259	Single Display, 1W8H / 2W8H
58268	Single Display, 4W2H / 4W4H
58260	Back-to-back, 1W2H / 2W2H
58261	Back-to-back, 1W4H / 2W4H
58262	Back-to-back, 1W8H / 2W8H
58270	Back-to-back, 4W2H / 4W4H

HANGING KITS (STAINLESS STEEL)

58401	Single Display, 1W2H / 2W2H
58402	Single Display, 1W4H / 2W4H
58403	Single Display, 1W8H / 2W8H
58407	Single Display, 4W2H / 4W4H
58404	Back-to-back, 1W2H / 2W2H
58405	Back-to-back, 1W4H / 2W4H
58406	Back-to-back, 1W8H / 2W8H
58408	Back-to-back, 4W2H / 4W4H

LED-BASED MARQUEE DISPLAY PART NUMBERS CONTINUED...

PMD 3500 MARQUEE DISPLAY

3500 - N 1W2H
 1 2

THE PMD 3500 IS THE SAME AS THE PMD 3000 WITH THE EXCEPTION IT IS EQUIPPED WITH TRI-COLOR LEDs.

1: Housing

N	NEMA 12
F	NEMA 4

2: Size

1W2H	11.5" x 40" x 4"
1W4H	16.3" x 40" x 4"
2W2H	11.5" x 76" x 4"
2W4H	16.3" x 76" x 4"
2W8H	25.9" x 76" x 4"

MISCELLANEOUS

27632	Fuse 5.0 A Slo-Blo
27633	Fuse 1.5 A Slo-Blo
27637	Fuse 3.0 A Slo-Blo
79722	User's Manual

HANGING KITS

58257	Single Display, 1W2H / 2W2H
58258	Single Display, 1W4H / 2W4H
58260	Back-to-back, 1W2H / 2W2H
58261	Back-to-back, 1W4H / 2W4H

LED-BASED MARQUEE DISPLAY PART NUMBERS CONTINUED...

PMD 3600 MARQUEE DISPLAY

Part Number	Description
3600 - N 016 S 1W2H 1 2 3 4 5	THE PMD 3600 IS THE SAME AS THE PMD 3100 WITH THE EXCEPTION IT IS EQUIPPED WITH TRI-COLOR LEDs.
1: Interface	
3600	Parallel
3650	Allen-Bradley Remote I/O, Data Highway, Data Highway Plus
3660	Texas Instruments Remote I/O
3680	GE Genius I/O
2: Housing	
N	NEMA 12
F	NEMA 4
3: Memory	
016	16K EEPROM
032	32K EEPROM
064	64K EEPROM
128	128K EEPROM
4: Sides	
S	Single Sided
5: Size	
1W2H	11.5" x 40" x 4"
1W4H	16.3" x 40" x 4"
2W2H	11.5" x 76" x 4"
2W4H	16.3" x 76" x 4"

MISCELLANEOUS PARTS

27632	Fuse 5.0 A Slo-Blo
27633	Fuse 1.5 A Slo-Blo
27637	Fuse 3.0 A Slo-Blo
79726	User's Manual

HANGING KITS

58257	Single Display, 1W2H / 2W2H
58258	Single Display, 1W4H / 2W4H
58260	Back-to-back, 1W2H / 2W2H
58261	Back-to-back, 1W4H / 2W4H

LIMITED WARRANTY POLICY

NEW PRODUCT WARRANTY

As to Products sold to Customer hereunder, UTICOR Technology, L.P. (hereinafter "UTICOR") shall not be deemed or held to be obligated or accountable upon or under any warranties or guaranties express, or implied, statutory, by operation of the law, or otherwise, in any manner or form, beyond the express warranty that the Products (a) will conform to the description contained in the Manual and (b) will be free from defects in material and workmanship, under normal use and service when correctly installed and maintained, for a period of ONE (1) year for Industrial Workstations, a period of TWO (2) years for Programmable Operator Interfaces and Programmable Message Displays and a period of FOUR (4) years for Marquee Products from UTICOR's tender of delivery to Customer. Excepted from this warranty are all batteries, all displays, and lamps. The warranty on these items is limited to the warranty granted to UTICOR by the device manufacturer. UTICOR HEREBY EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING THE WARRANTY OF MERCHANTABILITY. UTICOR's liability under any warranty is limited solely (in UTICOR's discretion) to replacing or repairing Products which become defective during the warranty period. Customer shall (1) notify UTICOR promptly in writing of any claims, and (2) provide UTICOR with an opportunity to inspect and test Products claimed to be defective. In no event shall UTICOR be liable for any defective Products if examination discloses that the defective condition of such Products was caused by misuse, abuse, improper installation or application, improper maintenance or repair, disassembly, alteration, accident or negligence in use, improper temperature, humidity or other environmental condition, storage, transportation or handling. Customer hereby expressly agrees to extend a Product warranty to its customers which is, in substance and scope, identical to the warranty provided by UTICOR in this paragraph.

PRODUCT REPAIR WARRANTY

As to all factory-made repairs, conversions and modifications, UTICOR shall not be deemed to be held or be obligated or accountable upon or under any warranties or guarantees express, or implied, statutory, by operation of the law, or otherwise in any manner or form, beyond the express warranty that the repairs, conversions, and or modifications will be free from defects in workmanship, under normal use and service when correctly installed and maintained, for a period of ninety (90) days from UTICOR's tender of delivery to Customer. UTICOR HEREBY EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING THE WARRANTY OF MERCHANTABILITY.

UTICOR's liability under any such warranty is limited solely (in UTICOR's discretion) to replacing or repairing the Product or Product component which is the subject of the specific repair, conversion and/or modification. In the event that any such product or component becomes defective during the warranty period, Customer shall (1) notify UTICOR promptly in writing of any claims, and (2) provide UTICOR with an opportunity to inspect and test Products claimed to be defective. In no event shall UTICOR be liable for any defective Products if examination discloses that the defective condition of such Products was caused by misuse, abuse, improper installation or application, improper maintenance or repair disassembly, alternation, accident or negligence in use, improper temperature, humidity or other environmental condition, storage, transportation or handling. Customer hereby expressly agrees to extend a Product warranty to its customers which is, in substance and scope, identical to the warranty provided by UTICOR in this paragraph.

LIMITATION ON LIABILITY FOR CONSEQUENTIAL DAMAGES RESULTING FROM PRODUCT MALFUNCTION

In the event that a Product or component malfunction leads to damages or injuries to the Product, the Customer's business, to the end-user's business, to other equipment, to a factory or place of business, or to employees or other persons. UTICOR's liability shall be limited solely to repair or replacement of parts of the Product or component under paragraph 1 and 2 above if the respective warranty periods described in said paragraph 1 and 2 have not expired. If such warranty period has expired, UTICOR shall not be liable for such damages or injuries, provided, however, that if a court of competent jurisdiction shall find as a matter of law that any clause of this paragraph is unconscionable, it is agreed that our liability shall be limited solely to a U.S. dollar amount equal to the cost of the malfunctioning product to Customer, less freight and insurance if included in Customer's invoice price and less any depreciation deductions or investment tax credits taken by Customer or another purchaser or end-user with regard to such Product on your or his income taxes. The remedies provided for herein shall be exclusive and shall be Customer's sole remedies.

ACKNOWLEDGEMENT

In the event of conflict between the terms printed on the face or reverse side of Customer's order from and UTICOR's acknowledgement form, the terms and conditions of this Agreement shall control. If this Agreement is silent as to a particular matter, the terms which appear on the reverse side of UTICOR's acknowledgement shall control, and UTICOR's acceptance is conditional upon Customer's assent to the terms which appear on the reverse side of UTICOR's acknowledgement.

DEFECTIVE DELIVERIES: REVOCATION OF ACCEPTANCE

Customer will give UTICOR notice in writing of any objections to incomplete delivery or deliveries of defective Products within thirty (30) days after delivery thereof. UTICOR will promptly undertake to remedy same in such manner as may be appropriate. No Products shall be returned to UTICOR without UTICOR's prior consent. Revocation of acceptance by Customer of the Products must also be in writing within thirty (30) days after delivery of the Products to Customer.

LIMITATION OF AUTHORITY

It is expressly understood between Customer and UTICOR that his Agreement does not give Customer any right or authority to act for or represent UTICOR or UTICOR's affiliates or to pledge UTICOR's creditor or contact any liability whatsoever on UTICOR's behalf. It is understood that this Agreement does not confer upon Customer any authority to warrant any Product sold hereunder, or to make any adjustments on UTICOR's behalf in connection with Products sold by Customer without UTICOR's express consent.

LIMITATION OF ACTIONS

No action for breach of the contract for the sale of the Products shall be commenced more than one year after the accrual of the cause of action therefore.

UTICOR TECHNOLOGY, L.P.

WARRANTY SERVICE PROCEDURES

Service and repair of UTICOR's products is provided at the factory, at:

4140 Utica Ridge Road
Bettendorf, Iowa 52722

The following procedures apply in all transactions involving service and repair of equipment under warranty.

Service at Customer's site is provided at Customer's expense. Charges for service calls are as per the applicable revision of the Field Service and School Rate Charges document, which can be obtained from UTICOR's Customer Service.

All equipment returns to the factory for warranty repairs must be authorized by the Customer Service Department.

The cost of shipment of the Product or components from the Customer's site to the factory at 4140 Utica Ridge Road, Bettendorf, Iowa 52722, is the Customer's responsibility.

Products or components repaired under warranty shall be returned to Customer by regular surface transportation at UTICOR's expense. Other modes of transportation requested by the Customer shall be at Customer's expense.

Products or components returned to UTICOR without prior authorization will be refused.

Products or components returned to UTICOR for warranty repairs with "Bill Recipient" shipping instructions will be refused unless prior arrangements have been made with UTICOR regarding payment of the inbound transportation costs.

OTHER PROVISIONS

The remedies set forth in this Warranty Policy are the only remedies available to any person for breach of warranty. UTICOR shall have no liability to any person or legal entity for indirect, incidental or consequential damages of any description, whether arising out of warranty or other contract, negligence or other tort or otherwise. UTICOR further disclaims all responsibility for any problems, injuries or claims arising from misapplication of its products, and for uses of its products in a manner inconsistent with published specifications and operating instructions.

All inquiries regarding warranty service and repair should be directed to Manager Customer Service, UTICOR Technology, L.P.

NOTICES

All notices that are required, or that may be given pursuant to this Agreement, shall be sent by registered or certified mail, return receipt requested, or by facsimile, to the addresses listed above or such other address and person as either or that parties may from time to time specify to the other in writing. A notice shall be deemed to have been given on the date of mailing or on the date of dispatch of a facsimile with confirmed answer-back.

ENTIRE AGREEMENT: APPLICABLE LAW

This Agreement constitutes the entire understanding between the parties and replaces and supercedes any prior agreements between the parties. This Agreement may not be changed, modified or amended except by an instrument in writing signed by Customer and UTICOR. This Agreement shall be interpreted for all purposes in accordance with the laws of the State of Iowa, and unless otherwise defined hereunder, all terms used herein which are defined in the Iowa Uniform Commercial Code (the "Code") have the same meaning hereunder as in the Code.